

GORYAYNOV, V.I., kand.tekhn.nauk, dots.

Determining the kinematic parameters of crankshaft presses
with speed-adjusting mechanisms. Sbor. MOSSTANKIN no. 5:57-68
'60. (MIRA 14:2)

(Power presses)

(Machinery, Kinematics of)

GORIYAYNOV, V.I., kand.tekhn.nauk, dots.

Kinematics of a coining press. Sbor. MOSSTANKIN no. 5:69-75
'60. (MIRA 14:2)
(Power presses) (Machinery, Kinematics of)

45244

S/771/61/000/000/005/006

1.1310

AUTHORS: Goryaynov, V.I., Lansky, Ye.N., Candidates of Technical Sciences.

TITLE: Crank-driven equipment.

SOURCE: Sostoyaniye kuznechno-shtampovogochnogo proizvodstva.
Ed. by V.T.Meshcherin. Moscow, VINITI, 1961, 220-292.

TEXT: The paper provides a state-of-the-art survey of the design, construction, and employment of crank-type equipment for forging and press-forming. The present abstract is focused primarily on the section dealing with developments in the USSR and the Soviet-bloc area. Among the current developmental trends in this field, the aggregatization of crank-type machines and the assembling of machines of any desired size from standard component parts by the Barnaul factory of mechanical presses (USSR) and the Bad-Salzung plant (GDR) are cited. The multidisk clutch of the Voronezh plant imeni Kalinin is described and illustrated (pp. 228-230). The NKMZ (New Kramatorsk machine-building plant) produces mechanical forging presses with an applied force of 4,000, 6,300, and 8,000 tons. A general-view photograph of the 8,000-ton press is shown in Fig.27. The carcass consists of welded components bolted into a dismountable aggregate. The press has a double-acting drive. Two independent electric motors (EM) drive the machine via

Card 1/3

Crank-driven equipment.

S/771/61/000/000/005/006

two disk-type friction clutches contained within the gears on either side of the crank-shaft. The clutches are actuated electropneumatically. Along with each clutch there is a band brake with pneumatic brake releases. The throw is mechanically regulated by an independent EM. The lower pusher-ejector is hydraulically driven. The machine has a central grease lubrication. The high rigidity of the press is reflected in its adequate accuracy. The height of the press is 14,400 mm, the stroke 507 mm, the number of strokes per minute 35. All New Kramatorsk forging presses employ the original welded stand. The Voronezh plant of heavy mechanical presses produces crank-driven forging presses from 630 to 2,500 tons. The stand is welded out of cast-steel and thick-sheet rolled components. The drive operates through a disk-type friction clutch located on the main shaft; a band brake is attached to the opposite end of the shaft. Clutch and brake are electropneumatically actuated. The lower pusher-ejector on the large presses (2,000 and 2,500 tons) is hydro-pneumatically actuated. The number of strokes per minute in these presses is 60-90, their height above the floor is 4,270-6,200 mm, their weight 35-143 tons. A front and side-view sketch is shown. The stand of the 4,000-ton embossing press produced by the NKMZ (p.268) consists of two parts connected by tie bolts. The table and both columns are cast of inoculated cast iron. The electropneumatically actuated disk-type friction clutch and analogous brake are installed on the first

Card 2/3

Drop-forging equipment.

S/771/61/000/000/004/006

from free forging toward die forging, the scope of free forging appears to be primarily focused on repair plants. The GOST All-Union Standard limits the weight of dropping parts of forge hammers to 5 tons. Only exceptionally are larger forge hammers made. Pneumatic hammers are more economical and more highly productive than steam-air hammers; hence the construction of pneumatic hammers with 1- to 2-ton dropping parts is entirely feasible (USSR hammers up to 0.75t are made, with a GOST maximum of 1 ton). Manipulators must be developed and introduced. The experience of Uralmashzavod and foreign firms is encouraging. Die forging: For small batches of relatively small forgings it is advisable to construct and develop inexpensive universal die-forging single-acting hammers with a weight of the dropping mass of up to 4 tons. These may be chain-, air-, or hydraulically driven. For parts 15 kg or heavier and parts made of high-temperature steels, double-acting steam-air hammers with 5- to 20-ton dropping weights are to be used. The latest improvements should be applied to the design of such hammers, including heavier and stronger anvils, optimal column design, control boosters, etc. The hammer should be erected on vibration-insulating foundations. For the final die-forging of otherwise preformed heavy billets, anvilless hammer with impact energies of 10 ton-m or more should be used. For extra-heavy billets (200-300 kg or more) anvilless hammers with impact energies of up to 150 ton-m are recommended. There are 19 figures and 19 references (2 Russian-language Soviet, 3 German, and 14 English-language).

Card 3/3

ASSOCIATION: None given.

GORAYNOV, V.I., kand. tekhn. nauk, dotsent

Determining drawing press force parameters according to industrial specifications. Sbor. MOSSTANKIN no.7:122-129 '64.

(MIRA 17:11)

GORYAYNOV, V.V.

AUTHORS: Kosinskiy, V.M., Engineer; Goryaynov , V.V. 117-58-6-22/36

TITLE: The Komsomol-Innovators of the Yuzhuralmashzavod (Komsomol' tsy-novatory Yuzhuralmashzavoda)

PERIODICAL: Mashinostroitel', 1958, Nr 6, pp 32-33 (USSR)

ABSTRACT: A.M. Karyukin and N.M. Goryunov, members of the Komsomol, who made some innovations in the production process of the South Urals Machine Construction Plant, are mentioned. Production has been increased 2 times by these innovations. The plant produces rolling-mill equipment. There is one photograph.

ASSOCIATION: Yuzhno-ural'skiy mashinostroitel'nyy zavod (South-Urals Machine Construction Plant)

AVAILABLE: Library of Congress

Card 1/1 1. Industry-Production-USSR

GORYKYEYEV, Mikhail Ivanovich

"Determination of Lactic Acid in Milk and Milk Products." 1933

"Determination of Prolonged Pasturization of Milk by the Sher-Gorli Process." 1934

"Research on Milk and Products of Its Processing" 1934

from biography on author, published in
Vestnik Akademii Nauk Kazakhstoy SSR, No 12 (117), Dec 1954, pp 39-41

GORYAYEV, Mikhail Ivanovich

"Simple Method of Determination of Chlorine Content according to Drost" 1934
from biography on author, published in

Vestnik Akademii Nauk Kazakhstoy SSR, No 12 (117), Dec 1954, pp 39-41

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCEDURES AND PROPERTIES INDEX																																																			
<p><i>ca</i></p> <p>Determination of fat in cream and other milk products high in fat. M. I. Gorynev. Russ. 45,108, Nov, 30, 1935. The fat is detd. dilatometrically by the difference in expansion coeff. of the fat and other components of the milk product.</p>																																																			
<p>ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

WORAYAYEV, Mikhail Ivanovich

"A Manual for Laboratory Workers in Butter and Cheese Producing Plants" 1935
(2nd Edition, 1947)

from biography on author, published in
Vestnik Akademii Nauk SS Kazakhstoy SSR, No 12 (117), Dec 1944, pp 35-41

GORUYAYEV, Mikhail Ivanovich

"Effect of Bichromate of Potassium in Canning of Milk on the Determination of
the Percentage of Fat" (1935)

from biography on author, published in

Vestnik Akademii Nauk Kazakhstov SSR, No 12 (117), Dec 1954, pp 39-41

GORYAYEV, Mikhail Ivanovich

"Electroneutralization of Milk" 1935

from biography on author, published in
Vestnik Akademii Nauk SSR Kazakhsyoy SSR, Vol 12 (117), Dec 1954, pp 39-41

GORYAYEV, Mikhail Ivanovich

"Alkaline Index and Alkalinity in Milk" 1936

from biography on author, published in

Vestnik Akademii Nauk Kazakhstoy SSR, No1 12 (117), Dec 1954, pp 39-41

GORYAYEV, Mikhail Ivanovich

"Concerning the Addition of Aromatics to Butter" 1936

from biography of author, published in

Vestnik Akademii Nauk Kazakhstoy SSR, No 12 (117), Dec 1954, pp 39-41

GORYAYEV, Mikhail Ivanovich

"Determination of Sugar in Milk by the Iodometric Method" 1937

from Biography on author published in:

~~Vestnik Akademii Nauk Kazakhstoy SSR~~, No 12 (117), December 1954, pp39-41

12

CA

The density of butter. M. I. Ganyayev. *Melochyma*
Prora, 4, No. 4, 9-10 (1937); *Chem. Zvest.* 1938, 1, 1000.
 A slice of butter weighing 3-5 g. is cooled 24 hrs. at 12-15°
 and kept at 12-17° while weighings are made. The butter
 is weighed in the air and then in MeOH or sunflower oil.
 W. A. Moore

ASH-51A METALLURGICAL LITERATURE CLASSIFICATION

12

C. A.

12

Essential oil of wild mint (*Mentha longifolia*). M. I. Khavakina and V. R. Khavakina. *Vestnik Akad. Nauk Kazakh. S.S.R.* 5, No. 1(34), 28-30(1968).—Stream distn. yields 0.57% by wt. (relative to air-dried material) of the oil, d_4^{20} 0.974, n_D^{20} 1.473, n_D^{25} 1.4748, $\gamma = 4.5$ (relative to H_2O). Sapon. no. 127.47; ester no. (after acetylation) 192.7; ester content 44.21%; bound menthol 10.0%; total menthol 57.37%. Some 82% of the oil boils at 80–110° at 10 mm. Lower fractions appear to consist of esters of low mol. wt. up to possibly isovalerates. The main fraction gives phenol tests as well as tests for aldehydes, pinene, and much menthol. (I. M. Kondapoff)

GORYAYEV, M.I.

Essential oils from wormwood. Izv.AN Kazakh.SSR Ser.khim. no.3:
102-103 '49. (MLRA 9:8)
(Wormwood) (Essences and essential oils)

GORYAYEV, M.I.: BAKANINA, N.I.

Study of the essential oil from *Artemisia sublessingiana* (Kell) H.
Krasch. Izv. AN Kazakh. SSR Ser. khim. no. 3:104-106 '49. (MLRA 9:8)
(Wormwood) (Essences and essential oils)

GORYAYEV, M. I.

"The Essential Oils of USSR Plants (Efirnyye Masla Flory SSSR), Alma-Ata, 1952, 380 pp.

GORYAYEV, M. I.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 123 - 7/12

Authors : Sokol'skaya, A. M., Candidate of Chem. Scs.

Title : Steroid saponin

Periodical : Vest. AN Kaz. SSR 6/123, 69-84, June 1952

Abstract : The molecular structure of steroid saponins, which are a group of glycosides, is described. Fifty references: 4 USSR, 11 German and 35 USA (1916-1954). Tables.

Institution :

Presented by: Active Member of the Acad. of Scs., Kaz. SSR., M. I. Goryaev

GORYAYEV, M.I., PIQULEVSKIY, G.V., redaktor.

[Characteristics of chemical compounds going into the make-up of essential oils] Kharakteristika khimicheskikh soedinenii vkhodiaschih v sostav efirnykh masel. Alma-Ata, Akademiia nauk Kazakhskoi SSR, 1953. 371 p. (MLRA 7:8)
(Essences and essential oils)

GORYAYEV, M. I.

U S S R

✓ Investigation of wormwood of the Kazakhstan flora for its alkaloid contents. M. I. Goryayev, A. T. Petukhova, and N. A. Syridova. *Trudy Alma-Atinskogo Zoovet. Inst.* 7, 244-51 (1953); *Russk. Zhur., Khim.* 1954, No. 32030.—The unit. of alkaloids (I) was studied in 29 species of wormwood (*Artemisia*) collected in different regions of Altai in 1951. It is concluded that all species contain I. The richest and poorest species with respect to I are indicated. E. Wierzbicki.

GORYAYEV, M.I.

Scientists of Kazakhstan aid, the great construction projects
of Communism. Vest.AN Kazakh SSR 10 no.2:49-56 F '53. (MLRA 7:4)

1. Vitse-president Akademii Nauk Kazakhskoy SSR.
(Russia--Public works)

TEPIYAKOVA, Z.; KARAGUYSHIYEVA, D.; GORYAYEV, M.I., deystvitel'nyy chlen.

Bacterial fertilizers and their effectiveness in the soils of Kazakhstan.
Vest.AN Kazakh.SSR 10 no.6:60-67 Je '53. (MLRA 6:8)

1. Akademiya nauk KazSSR (for Goryayev).
(Kazakhstan--Soil inoculation) (Soil inoculation--Kazakhstan)

CHIZHEVSKIY, A.L.; GORYAYEV, M.I.

Aeroionization of buildings. Vest.AN Kazakh.SSR 10 no.9:34-44 5 '53.
(MIRA 6:11)

1. Deystvitel'nyy ohlen Akademii nauk Kazakhskoy SSR (for Goryayev).
(Air, Ionized) (Air conditioning)

GORYAYEV, M. I.

⑥
 "New type of flotation agents (foaming agents) from essential oils of Kazakhstan wormwood. M. I. Goryayev, B. F. Polayev, I. M. Shabanov, and T. G. Gutsalyuk. *Vestnik Akad. Nauk Kazakh. S.S.R.* 10, No. 10 (Whole No. 103), 100-18(1953).--For flotation of Pb ores the formulations of Kazakhstan wormwood essential oils with $ZnSO_4$, $NaCN$, and $BuOCS_2K$ gave results comparable with those obtained with pine oil. For Zn ore flotation the formulation uses $CuSO_4$ and $BuOCS_2K$. The oils obtainable from some 80 varieties of the plant in that region can be divided into 3 groups; those contg. up to 80% cineole and close in compn. to eucalyptus oil, and those composed largely of mixts. of terpene hydrocarbons, terpene alcs., and variable amounts of cineole and camphor. The latter group can be used directly for flotation work. The methods of extrn. from naturally growing plants are discussed and numerous results of flotation expts. with various ore specimens are given.
 G. M. Kosolapoff

GORAYEV, M.I.

Chemical Abstracts

Vol. 48 No. 5

Mar. 10, 1954

Pharmaceuticals, Cosmetics, and Perfumes

Cineole (or eucalyptole). M. I. Goryaev. *Izvest. Akad. Nauk Kazakh. S.S.R. No. 118, Ser. Khim., No. 6, 90-100(1963).*—Summary of phys. and chem., as well as pharmaceutical properties of cineole with numerous references. G. M. Kosolaboff

Chemical Abstracts
May 25, 1954
Pharmaceuticals,
Cosmetics, and Perfumes

✓ Essential oil of *Artemisia mogoltavica*. M. I. Goryaev,
I. M. Shabanov, and L. A. Ignatova. *Izvest. Akad. Nauk
Kazakh. S.S.R. No. 123, Ser. Khim. No. 7, 75-8(1953).*—
The essential oil of *A. mogoltavica* contains 30.77% car-
bonyl compds., including 17.44% camphor, and other sub-
stances including tujone which was identified as the 2,4-
dinitrophenylhydrazone, m. 104-6°. The oil contains
12.3% cineole, 8.72% free alcs., and 10.04% esterified alcs.
G. M. Kosolapoff

Chemical Abstracts
May 25, 1954
Pharmaceuticals,
Cosmetics, and Perfumes

✓ Essential oil of *Artemisia macrocladia*. M. I. Gorvay,
I. M. Shabanov, and L. A. Ignatova. *Zhur. Priklad.
Khim.* 27, 115-17 (1954).—The essential oil of *A. macrocladia*
contains 40% cineole and 35% camphor. The oil con-
tains small amts. of org. acids among which only AcOH
was identified. Pigments which give the oil a green color
are also present; their nature is unknown. The higher
fractions contain sesquiterpenes which form azulenes.
The azulene picnates m. about 125°. The green pigments
are quite distinct from the azulenes. G. M. Kosolapoff

GORYAYEV, M.I.

U S S R

The essential oil of *Artemisia parviflora*. M. I. Goryayev and L. K. Tikhonova. *Vestnik Akad. Nauk Kazakh. S.S.R.* 11, No. 7 (Whole No. 112), 77-82 (1954).—The oil contains camphor 38.0, which is levorotatory, cineol 47, free terpene alcs. 6.9, and esterified alcs. 8.17%. The alcs. consist mainly of borneol, the esters of bornyl isovalerate. Only isovaleric acid was identified among the acids. Small amounts of unidentified phenols are present along with some sesquiterpenes, part of which are carbonyl derivs. On the basis of isolation of 2,4-dinitrophenylhydrazones, m. 190°, 221-3°, and 220-10°, it appears that α -tuljone, tetrahydro- α -cyperone, and Δ -cyperone are present. Most satisfactory separation of the components was made on an Al_2O_3 column in benzene. G. M. Kosolapoff.

GORYAYEV, M. I.

USSR

Comparative characterization of rose oil. M. I. Goryayev, T. E. Serkebaeva, A. P. Chigiga, and I. M. Shabanov. *Vestnik Akad. Nauk Kazakh. S.S.R.* 11, No. 4 (Whole No. 113), 100-6 (1954).—Rose gallica of local origin yields, on treatment of its flower petals with 20% NaCl, an essential oil, contg. free alcs. 70.5, 3.23%, esters 3.73, $\text{PhCH}_2\text{CH}_2\text{OH}$ 18.2, and geraniol and citronellol 8-10%. The oil obtained without the NaCl treatment contains a similar combination of components. The oil also contains small amts. of aldehydes and other substances. Citral and citronellal, obtained by usual oxidation, are sep'd. chromatographically on Al_2O_3 in the form of 2,4-dinitrophenylhydrazones in C_6H_6 ; the citral deriv. is the more mobile of the 2. G. M. K.

GORYAYEV, M. I.

USSR/Scientific Organization

Card 1/1 Pub. 123 - 1/15

Authors : Goryaev, M. I., Vice President of the Acad. of Sci. of the Kaz. SSR

Title : The Academy of Sciences of the Kaz. SSR on the eve of its new election

Periodical : Vest. AN Kaz. SSR 11/10, 3-15, Oct 1954

Abstract : A short sketch is presented of the history (7 years) of the Academy of Sciences of the Kaz. SSR in connection with the forthcoming election of Academy members.

Institution :

Submitted :

GORYAYEV, M. I.

USSR

Essential oil of *Artemisia forsyensis*. M. I. Goryayev and Zh. Ginzadina. *Vestnik Akad. Nauk Kazan. S.S.R.* 11, No. 12 (Whole No. 117), 68-70 (1954).—The above ground part of the plant contains 2.1% essential oil. d_{20}^{20} 0.931, n_D^{20} 1.4620, $[\alpha]_D^{20}$ +5.7. Acid no. 6.11 ester no. 79.9. The acid contains 2.0% volatile substances in esters. The oil also contains 2.0% volatile substances. n_D^{20} 1.4620, d_{20}^{20} 0.931, $[\alpha]_D^{20}$ +5.7. The oil contains over 40% sesquiterpene alcohols.

GORYAYEV, M.I.; SHABANOV, I.M.; IGNATOVA, L.A.

Study of the essential oil of *Artemisia macrosciadia* P.Pol.
Zhur.prikl.khim.27 no.1:115-117 Ja '54. (MLRA 7:3)
(Essences and essential oils) (*Artemisia*)

GORYAYEV, M. I.

Essential oil of *Artemisia macrostachya*. M. I. Goryaev,
I. M. Shabanov, and L. A. Ignatova. *J. Appl. Chem.*
U.S.S.R. 27, 104-5 (1954) (Engl. translation).—*See* C.A.
48, 6880c. H. L. H.

GORYAYEV, M.I.

USSR.

✓ Carbonyl and carbinol compounds of the essential oil of *Artemisia oucina*. L. M. I. Goryayev, L. A. Semakova, and I. M. Shalimov. *Izest. Akad. Nauk Kazakh S.S.R., Ser. Khim.* 1955, No. 8, 144-62 (in Russian; Kazakh summary, 153).—The oil contains 8% carbonyl compounds, mainly isomeric thujones; the corresponding alcs. as well as thujone are the common impurities in cineole. For prepn. of pure cineole a treatment with Na is recommended. The oil contains 5-7% thujyl alc., which appears to be the principal terpene alc. O. M. Kosolunoff

AM BI

GORIAYEV, M.I.

Vice president of the Academy of Sciences of the Kazakh S.S.R. Vest. AN
Kazakh. SSR 11 no.4:104-105 Ap '55. (MLRA 8:8)
(Goriaev, Mikhail Ivanovich, 1905-)

GORYAYEV M. I.

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2 May

Essential oil of *Artemisia transiliensis*. M. I. Goryayev and M. G. Tugachev. *Zhur. Vyshego Khim.* 25, 170 (1955) (Engl. transl. in J. Gen. Chem. (U.S.S.R.) 25, 165-6 (1955)). Steam distn. of the upper parts of the plant gave 0.40% yield of an essential oil, while the aq. distillate yielded a further 0.60% yield of a somewhat different oil. The former oil, d_4^{20} 0.8306, n_D^{20} 1.4570, $[\alpha]_D^{20}$ 12.2°, has a bitter taste and contains 0.01% HCO_2H , $iso-PrCO_2H$ 0.066%, acetone 1.6%, n -pentane trace, cineole 35-40%, thujyl alc. 1.5%, α -pinene 0.7%, camphor 7.5%, thujone 14.17%, and an unidentified sesquiterpene alc. The aq. distillate of the oil contains 12.3% HCO_2H , 1.17% $iso-PrCO_2H$, 30.7% phenols, and 0.2% cineole. G. M. Krasovskii

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(1)

GORYAYEV, M. I.

1. *Eschscholzia* in *Artemisia* *franchetiana* 21.1.1959

China, 25.12.1959. The plant yields 8.7% of essential oil, bp 6.5-6.7, to 14.99, with viscosity at 20° of 1.17 centipoises and surface tension of 30.52 dynes/cm. The oil contains cineol 12, *l*-camphor 13.18, aldehydes 5.62% (presumably plicatol and perillal), and a sesquiterpene which is a *l*-linalyl acetate giving a *l*-linalyl acetate in the *l*-linalyl acetate.

GORYAYEV, M.I.

INIKHOV, Georgiy Sergeyevich, zasluzhennyy deyatel' nauki i tekhniki,
doktor khimicheskikh nauk, professor; PEROV, S.S., retsenzent;
SEMENTIS, Z.F., retsenzent; GORYAYEV, M.I., spetsredaktor;
AKIMOVA, L.D., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor

[Biochemistry of milk and milk products] Biokhimiya moloka i
molochnykh produktov. Moskva, Pishchepromizdat, 1956. 294 p.
(MIRA 10:1)

(Milk--Analysis and examination)

GORYAYEV, M. I.

✓ Etheral oil of *Artemisia santolinifolia*. M. I. Goryayev, G. K. Kruglykhina, M. G. Pugachev, and I. M. Shabanov, *Izvest. Akad. Nauk Kazakh. S.S.R., Ser. Khim.* 1956, No. 9, 33-42.—The oil contains carbonyl compds. (mainly thujone and some fenchone) 30, camphor 3.7, free alcs. (mainly composed of thujyl alc., 2.3% borneol, and some fenchyl alc.) 13.2, esters 19.24, cineole 1, org. acids (HCO_2H and isovaleric acid) 8, phenols (mainly $p\text{-MeC}_6\text{H}_4\text{OH}$) 9%, and unidentified terpenes and azulene-forming sesquiterpenes. A qual. test for aldehydes was found. G. M. K.

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GORYAYEV, M. I.

3
 ✓ Essential oil of *Artemisia tomentosa*. M. I. Goryayev, T. B. Serkebaeva, and I. M. Shabanov. *Izvest. Akad. Nauk Kazkh. S.S.R., Ser. Khim.* 1956, No. 9, 43-9. The oil contains 26% hydrocarbons, mainly α - and β -pinene, 12.45% alcs. in the form of esters, and 24% free alcs. of unknown structure. Higher fractions contain azulene-forming sesquiterpenes which yield with Se a blue form of azulenes, whose p_{max} is 119.5-21°. The yield of azulene is 1% (on initial oil). A small amt. of carbonyl compds. and org. acids is present; their nature is undetd. G. M. K.

GORYAYEV, M.I.

Materials on a study of essential oils of some species of
 Artemisia. M. I. Goryayev, T. E. Serkebaeva, L. A.
 Ignatova, and I. M. Shabanov. *Izvest. Akad. Nauk
 Kazakh, S.S.R., Ser. Khim.* 1956, No. 9, 60-4.—*A. ter-*
singiana contains essential oil which contains terpene alcs.,
 phenols, 54.4% carbonyl compds., including 43.8% cam-
 phor, and aldehydes. The oil from *A. persica* contains
 7.2% δ -pinene, 18.3% borneol, 25.5% borneol esters,
 especially caproate, 14% camphene, 1.43% phenols, and
 small amts. of terpene alcs. and carbonyl compds. *A.*
arenaria carries essential oil which contains monocyclic
 terpenes (nitroso deriv., m. 157°) and apparently azulene
 forming sesquiterpenes. G. M. Kosolapoff

GORYAYEV, M.I.

✓ Essential oil of *Dracocephalum stamineum*. M. I. Goryaev, M. G. Pugachev, and I. M. Shabanov. *Izvest. Akad. Nauk Kazakh. S.S.R., Ser. Khim.* 1956, No. 9, 65-66. —The oil contains citral 34.13, neral 11.6, free geraniol 22, geraniol in the form of esters 13.35, azulenes 1-2%, and traces of linalool. G. M. Kosolapoff

3

GORYAYEV, M.I.

VOIKOVA, V.S.; GORYAYEV, M.I.

Antituberculous substances. Report No.5. Vest. AN Kazakh. SSR 13
no.4:80-85 Ap '57. (MLRA 10:6)

(Meconic acid)

~~GORYAN~~ M.I.; SHERMAN, P.N., red.; MAGIBIN, P.A., tekhn. red.

[Herbicides] Gerbitsidy. Alma-Ata, Kazakhskoe gos. izd-vo, 1958.
60 p. (MIRA 11:10)

(Herbicides)

KHISAMUTDINOVA, F.; GORYAYEV, M.I.

Antituberculous substances. Trudy Inst. klin. i eksp. khir. AN
Kazakh. SSR 4:122-129 '58. (MIRA 12:4)
(TUBERCULOSIS) (ANISIC ACID)

VOLKOVA, V.S.; GORYAYEV, M.I.

Antituberculous substances. Trudy Inst. klin. i eksp. khir. AN Kazakh.
SSR 4:130-133 '58. (MIRA 12:4)
(TUBERCULOSIS) (NICOTIC ACID)

GERVAYEV M.I.

Quantitative methods for the determination of alkaloids.

II. Determination of alkaloids in *Ephedra* M. I. Goryaev.

R. V. Sagomova, and I. M. Shalimova

14. N. 11 1925

$$T_{\text{eff}} = T_0 \left(1 + \frac{\alpha}{2} \right) \quad (1)$$

cc - [redacted] [redacted]

pressure, which removes the NH, and leaves the alkaloids in the emulsion for 48 hr. The alkaloids are dried with

in the remaining 800 cc. The alkaloids are distil. with H_2SO_4 and NaOH . In another method the 1500 cc. sub-

H_2SO_4 and NaOH . In another method, the latex is obtained by diaphragm, is filtered directly with 0.1 N HCl , and it is

assumed that the amt. of NH_3 from 10 g. of ephedra will

require 8-24 ml. of 0.1*N* HCl. The latter method is suit-

VOLKOVA, V.S.; GORYAYEV, M.I.

Antituberculous substances. Report No.6. Vest. AN Kazakh. SSR 14
no.7:98-104 J1 '58. (MIRA 11:9)
(PHARMACOLOGY) (TUBERCULOSIS)

AUTHORS:

Goryayev, M. I., Volkova, V. S., Tolstikov, G. A. SOV/79-28-8-23/66

TITLE:

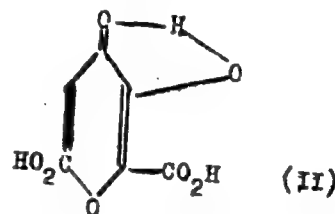
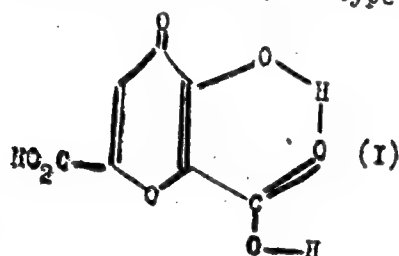
On the Problem of Hydrogen Bonds in Meconic Acid (K voprosu o vodorodnoy svyazi v mekonovoy kislote)

PERIODICAL:

Zhurnal obshchey khimii, 1958, Vol. 29, Nr 8, pp. 2102-2107 (USSR)

ABSTRACT:

The structure of meconic acid (mekonovaya kislota) permits with good probability to assume the presence of an intramolecular hydrogen bond. The problem is basically of which type the latter is, of type (I) or (II):



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On the Problem of Hydrogen Bonds in Meconic Acid

SOV/79-28-8-23/66

As is known (Refs 1-3), the presence of an intramolecular hydrogen bond in the molecule which contains a hydroxyl and a carboxyl group in the orthoposition causes a considerable change in the behavior of these groupings. No anomaly is detected in the molecular weight of phenols which contain this bond when they are determined in a neutral solvent, i.e. no reduction of the acidity or a complication of the ester formation. The participation of the carboxyl group in the intramolecular hydrogen bond leads to the increase of the acidity, to a complication of the ester formation, and to a facilitation of the decarboxylation. On the strength of this position the authors investigated several derivatives of the 3-oxy-4-pyrone all of which were obtained from the meconic acid which was produced from the waste products of opium production, the "meconates". A stable intramolecular hydrogen bond was found to exist in meconic acid. This bond is an ingredient of a six-membered cycle. The dissociation constants of meconic acid, of comenic acid (komenovaya kislota), and of pyromeconic acid according to the potentiometric titration were determined. The ester of 3-methoxy-4-pyrone-6-carboxylic acid was obtained which is not yet described in the publications. Figure 1 gives

Card 2/3

On the Problem of Hydrogen Bonds in Meconic Acid

SOV/79-28-8-23/66

the scheme of the molecule of the meconic acid with the mutual distance of the atoms. There are 4 figures, 2 tables, and 12 references, 7 of which are Soviet.

ASSOCIATION: Kazakhskiy gosudarstvennyy universitet
(Kazakh State University)

SUBMITTED: January 22, 1958

Card 3/3

GORYAYEV, M.I.; SAZONOVA, R.N.; SHABANOV, I.M.

Alkaloid determination in Ephedra by distilling with superheated
steam. Zhur. prikl. khim. 31 no.2:289-298 F '58. (MIRA 11:5)
(Ephedra) (Distillation)

GORYAYEV, M.I.; IGNATOVA, L.A.

Essential oil from *Trachyspermum copticum*. Izv. AN Kazakh. SSR, Ser.
khim. no.1:90-94 '59. (MIRA 13:6)
(Essences and essential oils)

GORYAYEV, M.I.; DZHALILOV, D.R.

Possibilities for industrial production of thujone. .Izv.AN:
Kazakh.SSR.Ser.khim. no.2:83-88 '59. (MIRA 12:8)
(Thujone)

TIKHONOVA, I.K.; GORYAYEV, M.I.

Esters of cineolic acid. Izv. AN Kazakh. SSR. Ser. khim. no. 2:79-
82 '59. (MIRA 12:8)

(Cineolic acid)

KHISAMUTDINOV, F.S.; GORYAYEV, M.I.

Investigating the chemical composition of Turkestan wormwood
tarragon oil (*Artemisia dracunculus* L. ssp. *turkestanica* Krasch.).
Izv. AN Kazakh. SSR. Ser. khim. no. 2:89-97 '59. (MIRA 12:8)
(*Artemisia*) (Essences and essential oils)

GORYAYEV, M.I.; POLYAKOV, P.P.; SHABANOV, I.M.

Organisation, methods, and results of expeditionary research on
vegetable raw materials. Trudy Inst. khim. nauk AN Kazakh. SSR
4:3-16 '59. (MIRA 13:3)

(Kazakhstan--Botany, Economic)
(Soviet Central Asia--Botany, Economic)

GORIAYEV, M.I.; SAZONOVA, R.N.; POLYAKOV, P.P.

Work results of the expedition for the study of wild aromatic plants
in southern Kazakhstan, organized by the Academy of Sciences of the
Kazakh S.S.R. in 1951. Report No.2. Trudy Inst. khim. nauk AN Kazakh.
SSR 4:17-23 '59. (MIRA 13:3)
(Kazakhstan--Wormwood)

GORYAYEV, M.I.; SAZONOVA, R.N.; POLYAKOV, P.P.

Work results of the expedition of 1952 for the study of aromatic plants
in Kazakhstan and Central Asia. Trudy Inst. khim. nauk AN Kazakh. SSR
4:24-29 '59. (MIRA 13:3)

(Kazakhstan--Wormwood) (Soviet Central Asia--Wormwood)

GORYAYEV, M.I.; SATDAROVA, E.I.

Investigating the essential oil of *Artemisia Serotina* Ege.
Trudy Inst. khim. nauk AN Kazakh. SSR 4:37-47 '59.

(MIRA 13:3)

(Essences and essential oils)
(Kazakhstan--Wormwood)
(Soviet Central Asia--Wormwood)

GORYAYEV, M.I.; SATDAROVA, E.I.

Investigating the essential oil of *Artemisia leucodes* Schrenk.
Trudy Inst. khim. nauk AN Kazakh. SSR 4:44-48 '59.

(MIRA 13:3)

(Essences and essential oils)

(Kazakhstan--Wormwood)

(Soviet Central Asia--Wormwood)

GORYAYEV, M.I.; SATDAROVA, E.I.

Investigating the essential oil of *Artemisia terrae albae* Krasch.
ssp. *Massagetovii* Krasch. Trudy Inst. khim. nauk AN Kazakh. SSR
4:49-56 '59. (MIRA 13:3)

(Essences and essential oils)
(Kazakhstan--Wormwood)

GORYAYEV, M.I.; DZHALILOV, D.R.

Investigating the essential oil of *Juniperus sabina* L. Trudy Inst.
khim. nauk AN Kazakh. SSR 4:57-67 '59.

(MIRA 13:3)

(Kazakhstan--Juniper) (Essences and essential oils)

GORYAYEV, M.I.; SAZONOVA, R.N.; POLYAKOV, P.P.; BELOVA, Ye.A.

Santonin-bearing wormwood species of the subgenus *Seriphidium* (Bess.)
Rouy from Kazakhstan and Central Asia. Trudy Inst. khim. nauk AN Kazakh.
SSR 4:68-96 '59.

(MIRA 13:3)

(Santonin) (Kazakhstan--Wormwood) (Soviet Central Asia--Wormwood)

GORYAYEV, M.I.; KRUGLYKHINA, G.K.; POLYAKOV, P.P.; SHABANOV, I.M.

Artemisia kurramensis Qasilb. as new source of santonin and thujone.
Trudy Inst. khim. nauk AN Kazakh. SSR 4:97-99 '59.

(MIRA 13:3)

(Santonin) (Thujone) (Kazakhstan--Wormwood)

GORYAYEV, M.I.; SAZONOVA, R.N.

Effect of light on santonin solutions. Trudy Inst. khim. nauk AN
Kazakh. SSR 4:100-111 '59. (MIRA 13:3)
(Santonin) (Photochemistry)

GORYAYEV, M.I.; KRUGLYKHINA, G.K.; SATDAROVA, E.I.; KURINNAYA, N.V.;
SHABANOV, I.M.; POLYAKOV, P.P.

Materials on the study of alkaloid resources in the flora of
Kazakhstan and some regions of Central Asia. Trudy Inst. khim.
nauk AN Kazakh. SSR 4:112-122 '59.

(MIRA 13:3)

(Kazakhstan--Botany, Economic)
(Soviet Central Asia--Botany, Economic)
(Alkaloids)

GORYAYEV, M.I.; SAZONOVA, R.N.; SATDAROVA, E.I.; SHABANOV, I.M.

Constancy of amide and ammonia nitrogen concentration in the ephedra
in connection with alkaloid synthesis in plants. Trudy Inst. khim. nauk
AN Kazakh. SSR 4:123-126 '59. (MIRA 13:3)
(Ephedra) (Alkaloids)

GORYAYEV, M.I.; SATDAROVA, M.I.

Variation of mono- and disaccharide concentration in different
apple varieties during storage. Trudy Inst. khim. nauk AN Kazakh.
SSR 4:135-137 '59. (MIRA 13:3)
(Apple-Storage) (Sugars)

GORYAYEV, M.I.; SAZONOVA, R.M.

Extraction and study of the composition of fatty oil from seeds of
wild *Angelica brevicaulis* (Rupr.) B. Fedtsch. plants. Trudy Inst.
khim. nauk AN Kazakh. SSR 4:138-141 '59. (MIRA 13:3)
(*Angelica*) (Oils and fats)

5.3900

75683
SOV/80-32-10-32/51

AUTHORS: Goryayev, M. I., Moshkevich, S. A., Sazonova, R. N.,
Shabanov, I. M.

TITLE: Determination of the Ephedra Alkaloids by the Oxalate
Method

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 10, pp 2313-2320
(USSR)

ABSTRACT: This is the third paper on the quantitative determination
of alkaloids and deals with the determination of alkaloids
of ephedra. The method is based on the solubility of alka-
loids of ephedra, using oxalic acid. The oxalate of pseudo-
ephedrine is readily soluble in cold water, but the oxalate
of ephedrine is almost insoluble in water. For this purpose
the alkaloid of ephedra is titrated with 2% oxalic acid until
neutral to litmus. Determination of ephedrine and pseudo-
ephedrine can be carried out by two methods: (1) alkaloids
were isolated by the usual standard method, by infusion with
1% H₂SO₄ and extraction with ether; (2) alkaloids were iso-
lated from the plant by steam distillation. Besides

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Determination of the Ephedra Alkaloids
by the Oxalate Method

75 583
SOV/80-32-10-32/51

ephedrine and pseudoephedrine in the mixture of the ephedra alkaloids, insignificant amounts of 1-norephedrine and 1-N-methylephedrine were found. The basic ephedrine was isolated from the ephedrine oxalate. Ephedrine hydrochloride has mp 215-216°. A mixed mp determination of the obtained sample with ephedrine hydrochloride showed no depression. Khorenko, E. A., took part in the development of the above methods. There are 5 tables; and 14 references, 5 Soviet, 2 U.S., 3 German, 1 Chinese, 1 Japanese, 1 French, 1 British. The 3 U.S. and British references are: Shou, T. Q., J. Biol. Chem., 70, 109 (1926); Black, O. F., and Kelly, J. W., Am. J. Pharm., 9, 12, 748 (1927); Smith, S., J. Chem. Soc., 2056 (1927).

SUBMITTED: May 23, 1958

Card 2/2

IGNATOVA, L.A.; GORYAYEV, M.I.

Reduction of *l*-camphor oxime on skeletal nickel. Izv. AN Kazakh.
SSR.Ser. khim. no.1:105-108 '60. (MIRA 13:11)
(Camphor) (Oximes)

IGHATOVA, L.A.; GORAYEV, M.I.

Synthesis of diethanolbornylamine esters. Izv. AN Kazakh. SSR. Ser.
khim. no.1;109-112 '60. (MIRA 13:11)
(Bornylamine)

GORAYEV, M.I.; DZHALILOV, D.R.

Study of the essential oil from needles of the juniper (*Juniperus turkestanica* kom.) Izv. AN Kazakh. SSR Ser. khim. no. 2:107-113
'60. (MIRA 14:5)

(Essences and essential oils) (Juniper)

GORYAYEV, M.I.; ZHIKULINA, Ye.B.

Antitumor preparations. Part 1: Synthesis of di-(2-chloroethyl)-amide
2-methyl-4-chlorophenoxyacetic acid and di-(2-chloroethyl)-hydrazide
2-methyl-4-chlorophenoxyacetic acid. Trudy Inst. klin. i eksp. khir.
AN Kazakh. SSR 6:200-203 '60. (MIRA 13:12)
(ACETIC ACID)

GORYAYEV, M.I.; DEMBITSKIY, A.D.

Antitumor preparations. Part 2: Synthesis of di-(2-chlorethyl)-amide
2,4-dichlorophenoxyacetic acid and di-(2-chprethyl)-amide Isonicotinic
acid. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 6:204-206 '60.

(ACETIC ACID)

(ISONICOTINIC ACID)

(MIRA 13:12)

IGNATOVA, L.A.; GORYAYEV, M.I.

Antitumor preparations. Part 3: Synthesis of di-(2-chlor-ethyl)-
bornylamine. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 6:207-
209 '60. (MIRA 13:12)

(BORNANAMINE)

5.5200,5.3610,5.3900

78245
SOV/80-33-3-46/47

AUTHORS: Goryayev, M. I., Sazonova, R. N., Moshkevich, S. A.,
Shabanov, I. M.

TITLE: Brief Communication. Oxalic Method of Alkaloids
Determination in Ephedra Using Permanganate Titration

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 3, pp 748-
750 (USSR)

ABSTRACT: This is Communication IV of a series of studies on
quantitative analytical methods for the determination
of alkaloids. The authors developed a separative deter-
mination of ephedrine and pseudoephedrine in ephedra
plants by titration of the alkaloid oxalates with
 KMnO_4 in acid medium. A 2% aqueous solution of oxalic
acid was added from a microburette to the mixture
of alkaloids extracted from the plants with the standard
method, until a neutral litmus reaction was obtained.
The mixture was then heated slowly until complete

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Brief Communication. Oxalic Method of
Alkaloids Determination in Ephedra
Using Permanganate Titration

78245

SOV/30-33-3-46/47

dissolution of the alkaloids. Cooling the solution to room temperature precipitated ephedrine oxalate in crystal form. The precipitate was dissolved with diluted sulfuric acid (1:100), heated to 80-90° C, and titrated while warm with 0.1N solution of KMnO_4 .

Pseudoephedrine oxalate in the filtrate was titrated in the same manner. The new method takes only 2 days as compared with 3-4 days required by the old method prescribed by GOST and based on different solubilities of the two alkaloids in petroleum ether. There are 2 tables; and 9 references, 2 Chinese, 7 Soviet.

ASSOCIATION:

Alkaloid Laboratory of the Institute of Chemical Sciences, Academy of Sciences, Kazakh SSR (Laboratoriya alkaloidov Instituta khimicheskikh nauk AN Kazakhskoy SSR)

SUBMITTED:
Card 2/2

August 27, 1959

GORYAYEV, M.I.; SERKEBAYEVA, T.Ye.

Study of the essential oil *Perovskia abrotanoides*. Terpene fraction.
Izv. AN Kazakh. SSR. Ser. khim. no. 1:107-111 '61. (MIRA 16:7)
(Essences and essential oils)

GORAYEV, M.I.; SHARIPOVA, F.S.

Study of the high boiling fraction of the essential oil *Perovskia*
angustifolia. *Izv. AN Kazakh. SSR. Ser. khim.* no.1:112-118 '61.
(MIRA 16:7)

(Essences and essential oils)

MIRFAIZOV, Kh.M.; GORAYEV, M.I.

Hydrolysis kinetics of reed hemicellulose. Gidroliz. i lesokhim.
prom. 14 no.3:9-10 '61. (MIRA 14:4)

1. Institut khimicheskikh nauk AN KazSSR.
(Hemicellulose) (Hydrolysis) (Reed (Botany))

VOLKOVA, V.S.; GORYAYEV, M.I., akademik

Antituberculosis agents. Report No.9: Synthesis of derivatives of
1-amino-3-oxy-4-pyridone-6-carboxylic acid. Vest.AN Kazakh.SSR 17
no.4:38-42 Ap '61. (MIRA 14:5)

1. Akademiya nauk KazSSR (for Goryayev).
(PYRIDONECARBOXYLIC ACID)

GORYAYEV, M.I.; TOLSTIKOV, G.A.

Compounds entering into the composition of essential oils. Part 1:
Isomerization of cedrene oxide. Zhur. ob. khim. 31 no. 2:644-
652 F '61. (MIRA 14:2)

1. Institut khimicheskikh nauk AN Kazakhskoy SSR.
(Cedrene)

S/080/61/034/004/011/012
A057/A129

AUTHORS: Goryayev, M. I., Tolstikov, G. A., Yel'chibekova, L. A.

TITLE: On the preparation of monoperphthalic acid

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 4, 1961, 946 - 947

TEXT: In the present paper a method for preparation of monoperphthalic acid is described, based on an improvement of the method presented by E. Royals and L. Harrell (Ref. 3: J. Am. Chem. Soc., 77, 3405, 1955). Monoperphthalic acid is used, as well as perbenzoic acid, for epoxidation of unsaturated compounds. Monoperphthalic acid is usually prepared by H. Boehme's method (Ref. 1: Ber., 70, 379, 1937), but this method has some disadvantages. Royals and Harrell's method is based on mixing phthalic anhydride, 30 % hydrogen peroxide and diethyl-ether at room temperature for 24 hours. The present authors tested this method and observed that the indicated yield of 65 % can be attained already after a time of mixing of only 6 hours. If the procedure is carried out at 30 - 35°C a yield of 65 - 70 % is obtained in 3 - 4 hours. Increasing the used hydrogen peroxide amount to a double amount makes possible to obtain monoperphthalic acid with a 63 - 65 % yield after mixing for 1 hour at 30 - 35°C. The following proce-

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Card 1/3

On the preparation of monoperphthalic acid

S/080/61/034/004/011/012
A057/A129

ture was carried out in the present experiments: After mixing the three components for a certain time at a given temperature (see table) the ethereal layer was washed 3 - 4 times with 40 % ammonium sulfate solution and dried with calcinated sodium sulfate. The amount of active oxygen was determined iodometrically. Extraction of the aqueous layer with ether increase the monoperphthalic acid yield by 4 - 5 %. In all experiments 30 g (0.2 mole) phthalic anhydride and 200 ml ether were used. Monoperphthalic acid obtained by one of the procedures (see table) was used for the oxidation of cedrene by the following method 40.8 g (0.2 mole) of cedrene was oxidized at 0°C in the ethereal solution of monoperphthalic acid, containing 3.50 g (0.22 mole) of active oxygen. The mixture was left to stand at 0°C for 24 hours, the precipitated phthalic acid was filtered off and washed with ether, then the ethereal solution was washed several times with 5 % NaOH solution and subsequently with water, and was dried with sodium sulfate. After vacuum distillation 39.7 g (90 %) of cedrene oxide with a boiling point of 121 - 121.5°C (5 mm), $n_D^{20} = 1.4962$, $d_4^{20} = 1.0032$, $[\alpha]_D^{20} = 81.2^\circ$ was obtained. There is 1 table and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

SUBMITTED: July 16, 1960

Card 2/3

GORYAYEV, M.I., akademik; TOLSTIKOV, G.A.

Synthesis of β -cedrene. Dokl. AN SSSR 139 no.2:363-366 J1 '61.

(MIRA 14:7)

1. Institut khimicheskikh nauk AN KazSSR. 2. AN KazSSR (for Goryayev).

(Cedrene)

POTAPOV, V.M.; GORAYEV, M.I., akademik; TOLSTIKOV, G.A.; TEREENT'YEV, A.P.

Rotatory dispersion of cedrane series compounds. Dokl. AN SSSR
140 no.6:1341-1344 0 '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. AN Kazakhskoy SSR (for Goryayev). 3. Chlen-korrespondent AN SSSR (for Terent'yev).

(Cedrane)

GORAYEV, M.I., akademik; TOLSTIKOV, G.A.

Structure of sabinene monohydrochloride. Dokl. AN SSSR 141 no.4:
855-856 D '61. (MIRA 14:11)

1. Institut khimicheskikh nauk AN KazSSR. 2. AN KazSSR
(for Goryayev).

(Thujene)

GORYAYEV, M.I.; BAZALITSKAYA, V.S.; POLYAKOV, P.P.; MENZHULINA, N.A.,
red.; KHUDYAKOV, A.G., tekhn. red.

[Chemical composition of wormwoods] Khimicheskii sostav polynel.
Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1962. 151 p.

(MIRA 16:3)

(Wormwood) (Plants—Chemical analysis)

GORAYEV, M.I.; SEITOV, Z.S.; DENISENKO, L.Ye.

Drying by sublimation pure cultures of fodder and wine yeasts.
Trudy Inst.mikrobiol.i virus.AN Kazkah.SSR 6:171-173 '62.

(YEAST—DRYING)

(FREEZE—DRYING)

(MIRA 15:8)

IBRAYEV, G.Zh.; GORYAYEV, M.I.

Separation of furfurole by gas-liquid chromatography. *Gidroliz.*
i lesokhim.prom. 15 no.8:25-26 '62.9 (MIRA 15:12)

1. Institut khimicheskikh nauk AN KazSSR.
(Furaldehyde) (Gas chromatography)

GORYAYEV, M.I.; TOLSTIKOV, G.A.

Study of the substances entering into the composition of essential oils. Part 2: Condensation of sabinene with diazoacetic ester.
Zhur. ob. khim. 32 no.1:310-312 Ja '62. (MIRA 15:2)

1. Institut khimicheskikh nauk AN Kazakhskoy SSR.
(Sabinene) (Acetic acid)
(Essences and essential oils)

RADAKOV, G.A.; GORYAYEV, M.I.; TOLSTIKOV, G.A.

Catalytic transformations of terpenes. Part 9: Isomerization of sabinene by means of metatitanic acid. Zhur. ob. khim. 32 no.1: 312-315 Ja '62. (MIRA 15:2)

1. Institut khimicheskikh nauk AN Kazakhskoy SSR.
(Sabinene) (Titanic acid)

S/079/62/032/003/006/007
D204/D302

AUTHORS: Goryavay, M.I. and Tolstikov, G.A.

TITLE: Study of compounds occurring in volatile oils. IV. Reduction of the α -oxide of cedrene (A)

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 3, 1962, 997-999

TEXT: Reduction of A with LiAlH_4 (in 300% excess) gave, after boiling for 24 hours, 35% of pseudocedrol and some isocedrenol. Catalytic hydrogenation of A on skeletal Ni or Adams' Pt did not proceed at 40°C and atmospheric pressure. At 110°C and under a pressure of 130 atm of H_2 , A yielded 66% of isocedranol. Full experimental details are given. There are 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: A. Moor, J. Am. Chem. Soc. 78, 1173, (1956),

ASSOCIATION: Institut khimicheskikh nauk An Kaz. SSR (Institute of Chemical Sciences AS Kazakhskaya SSR)

SUBMITTED: February 7, 1961
Card 1/1